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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,293	01/24/2002	Yuji Kakehi	2576-119	2438

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EXAMINER	
SHARMA, SUJATHA R	

ART UNIT	PAPER NUMBER
2684	

DATE MAILED: 12/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/936,293	KAKEHI, YUJI	
	Examiner	Art Unit	
	Sujatha Sharma	2684	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 January 2002*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-15* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4-10* is/are allowed.

6)☒ Claim(s) *1-3 and 11-15* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *1/24/02, 9/12/01*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Specification

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terasawa [US 2002/0122396] in view of Hall [US 6,208,871].

Regarding claim 1, Terasawa discloses a mobile communication terminal comprising:

- a receiver receiving a radio wave from a base station; see Fig. 5, element 160
- a sampling unit sampling a signal received by said receiver; see Fig. 5, element 160, paragraph 81
- a demodulator (5) demodulating the signal sampled by said sampling unit (3); see Fig. 5, element 162A – 162N, paragraph 81
- a cell selector selecting a most significant cell/sector based on data demodulated by said demodulator; see paragraphs 21, 81-83
- a path detector detecting multiple paths based on the signal sampled by said sampling unit; see paragraphs 21, 81-83

However Terasawa does not disclose a method wherein a clock generator generating sampling clocks with changed timing by inserting different frequency clocks into the sampling clock based on the cell/sector selected by said cell selector and based on the primary path detected by said path detector, and supplying the sampling clock to said sampling unit.

Hall, in the same field of endeavor, teaches a method wherein a clock generator generating sampling clocks with changed timing by inserting different frequency clocks into the sampling clock based on the cell/sector selected by said cell selector and based on the primary path detected by said path detector, and supplying the sampling clock to said sampling unit. See col. 9, lines 29-53.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Hall to Terasawa in order for the mobile to properly synchronize with the selected base station and establish an effective communication link with the selected base station.

Regarding claim 2, Terasawa further discloses a method wherein said clock generator inserts one different frequency clock into the sampling clock to change the timing of said sampling clock. See col. 9, lines 29-53.

Regarding claim 3, Terasawa further discloses a method wherein said mobile communication terminal is a mobile communication terminal employing a code division multiple access system. See fig. 2, col. 2, lines 65-67

3. Claims 11-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Terasawa[US 2002/0122396] in view of Padovani [US 2003/0142656].

Regarding claims 11-14, Terasawa discloses a mobile communication terminal comprising:

- a receiver receiving a radio wave from a base station; see Fig. 5, element 160
- a sampling unit sampling a signal received by said receiver; see Fig. 5, element 160, paragraph 81
- a cell selector selecting a most significant cell/sector based on signal sampled by said sampling unit; see paragraphs 21, 81-83
- a path detector detecting multiple paths based on the signal sampled by said sampling unit; see paragraphs 21, 81-83

However, Terasawa does not disclose a method of cell selection based on two thresholds. Padovani in the same field of endeavor, teaches a method of cell selection based on two-thresholds/ hysteresis value. See paragraphs 24 and 95.

Therefore it would have been obvious to one with ordinary skill in the art at the time the invention was made to provide the above teachings of Padovani to Terasawa in order to avoid unnecessary handoff and thus improve system performance.

Regarding claim 15, Terasawa further discloses a method wherein said mobile communication terminal is a mobile communication terminal employing a code division multiple access system. See fig. 2, col. 2, lines 65-67

Allowable Subject Matter

4. Claim 4 is allowed. The following is a statement of reasons for the indication of allowable subject matter:

Claim 4 discloses a unique feature wherein a determining unit detecting a primary path from the multiple paths detected by said path detector, and determining whether said primary path is to be changed or not, based on the states of the forward alignment and backward alignment of said primary path;

Therefore independent claim 4 and its dependent claims 5-10 are allowed.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Suzuki [JP 10075476] Base station detection circuit

Kanai [US 5,239,667] Method of controlling handoff in cellular mobile radio communication system

Mulford [US 5,991,901] Indication of coverage area limits within digital communication systems

Umemoto [US 5,960,335] Digital radio communication apparatus with RSSI information measuring function

Chuang [US 5,363,376] Method and apparatus for synchronizing timing among radio ports in wireless communications systems

Onoda [JP 03268697] Mobile radio communication system

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sujatha Sharma whose telephone number is 703-305-5298. The examiner can normally be reached on Mon-Fri 7.30am - 4.00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 703-308-7745. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Sujatha Sharma
December 7, 2004

NAY MAUNG
SUPERVISORY PATENT EXAMINER